

Data sheet for SIMOTICS S-1FG1

Article No. : **1FG1103-1PE34-2HM1-Z
D04+G23+K07**

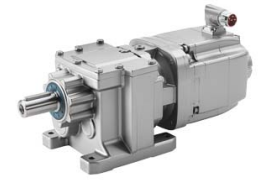


Figure similar

Client order no. :
Order no. :
Offer no. :
Remarks :

Item no. :
Consignment no. :
Project :

Gearbox data

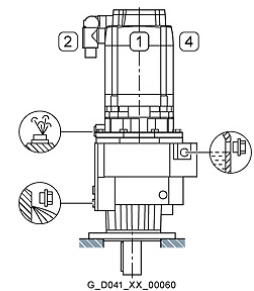
| | |
|---|-------------------------|
| Gear box type | Z39 |
| Gearbox basic type | Helical geared Z / D |
| Gearbox size | 39 |
| Transmission stages | 2 |
| Transmission (ratio) | 14.79 |
| Gear number relation | 1183/80 |
| Output moment maximum (short-time) | 193 Nm |
| max. input speed (briefly) | 4,500 rpm |
| Output speed short-time | 304 rpm |
| Emergency off output moment (1000 cycles) | 325 Nm |
| Radial force maximum | 1,610 N |
| Max. permissible radial force with Mmax | 1,610 N |
| Moment of inertia | 0.47 kgcm ² |
| Torsional stiffness | 12 Nm/° |
| Efficiency | 0.95 |
| Mounting position | M4 |
| Mounting type | Housing flange (C type) |
| Output shaft version | Solid shaft standard |
| Output shaft dimension | V25 x 50 mm |
| Gearbox flange diameter | -/- |
| Output shaft bearing | No |
| Figure 2 torque support | - |

General tech. specifications

| | |
|--|---|
| Color of the housing | Standard painting (Anthracite RAL 7016) |
| Specification | CE / UL / CSA / EAC / cRUus |
| Net weight | 17.23 kg |
| 1 m-sound pressure level L _{pA} (Tol.+3dB(A)) | 70 |
| Plug position | top (default) (2) |
| Adapter flange position | top (default) (2) |

Lubrication and sealing

| | |
|----------------------|---------------------------------|
| Gear oil | Polyglycol oil CLP ISO PG VG220 |
| Output shaft sealing | Seal longer service life |
| Oil charge | 0.90 l |



G_D041_XX_00060

Motor data

| | |
|------------------------|--|
| Motor type | Permanent-magnet synchronous motor |
| Motor type | Compact |
| DC-link voltage, max. | 510...720V |
| Shaft height | 63 mm |
| Cooling | Natural cooling |
| Rated speed | 4,500 rpm |
| Rated torque (100K) | 3.00 Nm |
| Rated power | 1.41 kW |
| Rated current (100K) | 3.80 A |
| Static torque | 10.10 Nm |
| Static current | 11.10 A |
| Moment of inertia | 14.70 kgcm ² |
| Efficiency η | 91 % |
| Temperature monitoring | Pt1000 temperature sensor |
| Connector size | 1 |
| Degree of protection | IP65 |
| Encoder system | Resolver R14DQ: resolver 14 bits (resolution 16384, internal 2-pole) |

Limiting data

| | |
|----------------------------|-----------|
| Maximum speed (short-time) | 7,200 rpm |
| Maximum torque | 35.00 Nm |
| Motor current short term | 42.0 A |

Optimum operating point

| | |
|---------------|-----------|
| Optimum speed | 3,600 rpm |
| Optimum power | 2.20 kW |

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Recommended Motor Module

| | |
|--------------------------|---------|
| Rated inverter current | 18.0 A |
| Maximum inverter current | 54.0 A |
| Maximum torque | 35.0 Nm |

Standards

| | |
|---------------------------|-----------------------------|
| Compliance with standards | CE / UL / CSA / EAC / cRUus |
| CE marking | EN 60034 |

Options

| | |
|-----|---|
| D04 | M4 for helical and parallel shaft gearboxes |
| G23 | Seal longer service life |
| K07 | Polyglycol oil CLP ISO PG VG220 |

Info servo geared motor

Outside the standard temperature range of -10 to +40 °C, further selectable options must be observed, in addition to the lubricant selection.

Further, you have to check the suitability of the components and options used for the requested temperature range.